



ROCKY MOUNTAIN ARSENAL • WINTER 2006 • website: www.rma.army.mil

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Photo property of U.S. Army

**Rocky Mountain Arsenal
Community Information Line
303.289.0136**

The animal species of the Rocky Mountain Arsenal National Wildlife Refuge (Refuge) handle the winter months differently. While some animals - such as reptiles - settle down for a long winter's nap, others prefer to roam through a winter wonderland. Mammals, specifically deer and coyotes, are more active and more visible. Additionally, eagles return from summer vacation, searching for food and open water, and reclaim their winter residence at the Refuge.

The human species of the Refuge also behaves differently. People may be spotted snowshoeing on trails, watching eagles, or riding the trolley through the snow-covered prairie, wetlands, and woodlands. With trees bare, animals active, and snow masking the camouflaging effect of the prairie, winter is an ideal time for people to view wildlife. This, coupled with the land's available food and water, makes the Refuge in wintertime a place where various species, human and otherwise, flock.

For more information on wildlife viewing opportunities and winter nature programs, please call the Refuge at 303-289-0930.

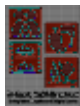
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PROPOSED DELETION COULD MORE THAN DOUBLE REFUGE SIZE

The Rocky Mountain Arsenal National Wildlife Refuge (Refuge) could more than double in size next year, if a proposal to delete (remove) roughly 7,000 acres from the Environmental Protection Agency's (EPA) Superfund National Priorities List is approved. The removal would allow the land to then be transferred to the U.S. Fish and Wildlife Service for incorporation into the Refuge.

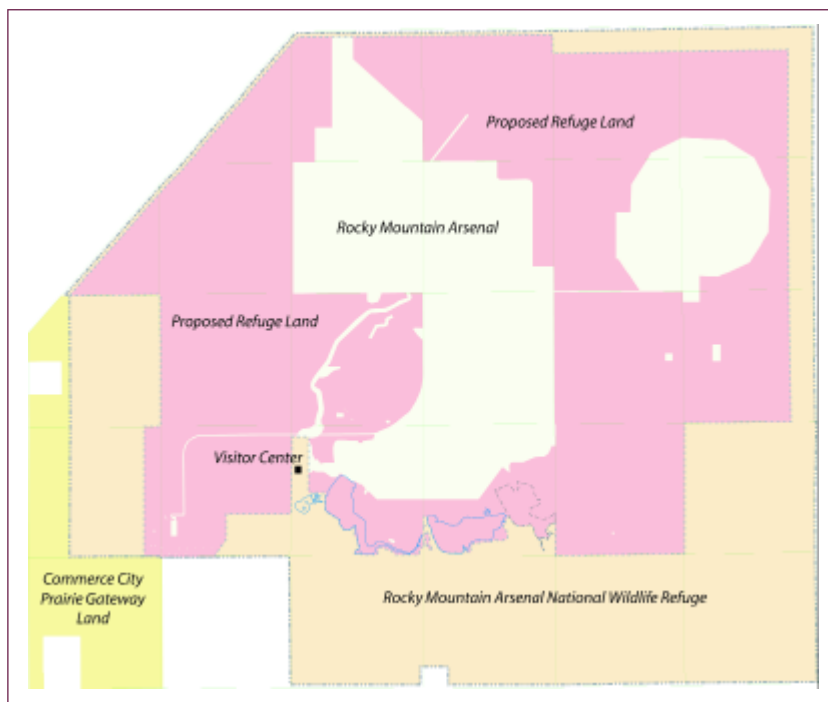
Known as the Internal Parcel, the land includes most of the eastern and northwestern areas of the Rocky Mountain Arsenal (Arsenal) (see map). It does not include the former manufacturing areas, landfills or waste basins.

If the removal is

approved, it would allow a third parcel of the Arsenal to be taken off the Superfund cleanup list. The first was the roughly 1,000 acres that Commerce City purchased to develop as the Prairie Gateway. The second parcel of approximately 5,000 acres was transferred to the U.S. Fish

and Wildlife Service in 2004 to establish the Rocky Mountain Arsenal National Wildlife Refuge.

After the Arsenal submits a document showing that all required clean-up actions have been completed, the EPA will publish a Notice of Intent to Delete and open a public comment period. The EPA will also hold a public meeting to explain the land removal proposal and answer questions. ■



ROD AMENDMENT SIGNED FOR LIME BASINS AND FORMER BASIN F

In October, the U.S. Army, the Environmental Protection Agency (EPA) and the Colorado Department of Public Health and the Environment, approved the Record of Decision (ROD) Amendment for the Lime Basins and Former Basin F.

This approval will "flip flop" the original cleanup plans for the Lime Basins with the original plans for Former Basin F. Initially, the Army intended to excavate the Lime Basins and dispose the soil and debris into an on-site triple-lined landfill. Contaminated soil from Former Basin F was to be solidified and remain in place with a protective cover constructed over the area.

The plan to revise the original cleanup remedy came after the Army discovered that the excavation of the Lime Basins would increase short-term risk, labor and cost due to the consistency and volume of the waste.

After conducting research, the Army proposed keeping the Lime Basins in their current location with both a protective cover and installation of an underground barrier wall (slurry wall) around the site. This would allow the soils from Basin F to be excavated and placed in the triple-lined landfill.

Before approving the amendment, the Army encouraged public input on the proposal, held a public meeting and extended the public comment period. Public notices were printed in local newspapers and the Proposed Plan, a fact sheet, and public notices were available on the Rocky Mountain Arsenal's (Arsenal) website (www.rma.army.mil).

Now that the projects have been approved, they are currently being designed and will be available for public comment at key points during the design process, as are all cleanup projects at the Arsenal. Former Basin F and the Lime Basins projects are expected to begin in 2007. ■

WEATHER plays key role in BASIN F WASTEPILE work



When residents hear mention of the Basin F Wastepile, they may recall the initial project work that took place in 1988-89. The project generated odor complaints from neighboring communities, and it taught Rocky Mountain Arsenal (Arsenal) workers valuable lessons on how to minimize the impact of odors for the upcoming cleanup projects.

One lesson learned is that weather plays an important role in odor control. This is because weather directly

determines the amount of dispersion, or mixing, of any given odor source. The more the air mixes, the lower the odors. As a result, the Arsenal plans on extensive weather monitoring to influence how daily work is accomplished at Basin F.

While typical weather-



forecasts, provide some guidance, workers are more concerned with predicting what will happen over the course of the day, rather than over a few days. One way to monitor weather conditions is by using an on-site weather tower, or meteorological tower. This tower, 140 feet high and located near the Wastepile, provides real-time data at different elevations and reports wind speed, direction, air temperature and solar radiation. It can indicate when favorable and unfavorable air mixing conditions exist. These conditions are mainly affected by the following three factors:

- Sun
- Wind
- Moisture

Because a key to avoiding odor impacts is good air mixing, the ideal operating conditions are during dry, sunny, slightly breezy days. Thus, to operate primarily during the most favorable weather conditions, the final cleanup of the Basin F Wastepile project is set to begin in April 2006.

Even on nice days, Colorado weather changes. If the meteorological tower detects unfavorable air mixing conditions, more rigorous odor controls will be applied. These controls may include a clean soil cover, odor-suppressing foam, a plastic liner, and reduction in the excavation rate or a combination of these controls. In very

unfavorable conditions - no sun, no wind, high humidity - the project may be temporarily suspended.

Another lesson learned from the previous Basin F Wastepile project is that a smaller excavation area would result in better odor control. This project will involve the excavation of less than one acre at a time instead of all 93 acres (as done in 1988). In addition, a test run, or "Slow Start" phase, will be implemented before the project moves into full operations and will involve testing a small corner of the Wastepile to ensure procedures and protocols are successful in containing odors. After 6-8 weeks, workers plan to proceed with full operations, but will be excavating at any given time less than one acre.

Additionally, odor monitors will be strategically placed around the site. Keeping with the proven notion that the human nose is the best "odor monitor," one person will be located at the Basin F Wastepile and another will monitor the Arsenal's perimeter. A person will also be in the community each night to test for odors. If he/she finds that odor hasn't been contained, this person will notify a response team to apply additional odor control measures.

All members of the local community have the ability to be "odor monitors"; anyone may call the 24-hour Tri-County Health Department's Information Hotline at 303-286-8032 to report odorous air. Additionally, to report odors during the day, or for more information about this project, please call the Arsenal at 303-289-0136.

Please also note that the Rocky Mountain Arsenal National Wildlife Refuge (Refuge) will be closed to the public in April and May during the first phase of this project. Once the initial phase has proven successful, the Refuge will be reopened for weekday and weekend visitation. For more information about the Refuge, please call 303-289-0930. ■



The meteorological tower stands 140 feet high and provides real-time weather data.

2005 Year in Review

As 2005 comes to a close, the Arsenal takes another step toward its goal of making one of the largest open spaces in the Denver metro area a haven for Colorado wildlife. The realization of this goal depends heavily on what is achieved in various projects; this year marked another year of significant accomplishments.



Photo: Rich Keen/DPR Inc.

Triple-Lined Landfill



Photo: Fred Krampetz/USFWS

Reseeding



Photo: Rich Keen/DPR Inc.

Basin F Haul Road

Basin F Wastepile Remediation Support facilities designed to help the April 2006 start of the Basin F Wastepile excavation continued to be built throughout the year. A dedicated haul road from the Wastepile to the on-site triple-lined landfill, which will aid with transporting waste, is also under construction.

Complex (Army) Disposal Trenches Cover Arsenal workers began shaping the area in preparation constructing a protective cover over the project site. Soil in this area is being specifically shaped to prevent pooling of excess rainwater and snowmelt from the cover.

Mortar Testing Range The removal of old munitions and munitions debris from the Mortar Test Range was successfully completed. Sophisticated metal detectors helped Arsenal workers to locate and remove metals and old munitions debris.

Reseeding The reseeding of native plants and grasses, an essential step in restoring the short-grass prairie following cleanup work, continued to be accomplished. This year, 270 acres were reseeded, which is roughly the equivalent of 225 football fields. With the reseeding of this acreage, 60 percent of the overall goal to reseed 7,000 acres has been completed.

Section 36 Balance of Areas Soil In order to ensure the effectiveness of protective covers that will be constructed over identified cleanup projects, soil in this area was specifically shaped to prevent pooling of excess rainwater and snowmelt from the cover.

Shell Disposal Trenches Cover Similar to the Complex (Army) Disposal Trenches and the Section 36 Balance of Areas Soil project, the Shell Disposal Trenches were also prepared for a protective cover. While the soil for the Complex (Army) Disposal Trenches is just beginning to be shaped, the shaping for the Shell Disposal Trenches was completed this year and now awaits cover construction, which is scheduled to begin in summer 2006.

Triple-Lined Landfill For the past two years, Arsenal contractors have diligently been constructing the on-site triple-lined landfill. The physical construction of this landfill - consisting of three clay and thick plastic liners - reached completion. The landfill will begin accepting Arsenal-only waste beginning in April 2006.